

Practice A

For use with pages 316–324

Match the figure with the method you would use to show that it is a parallelogram.

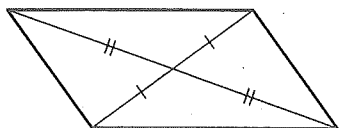
A. $x^\circ + y^\circ = 180^\circ$



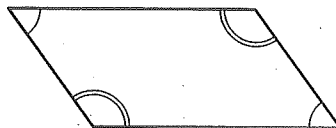
B.



C.



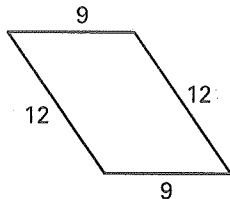
D.



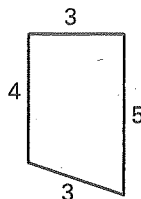
1. Show that both pairs of opposite sides are congruent.
2. Show that both pairs of opposite angles are congruent.
3. Show that one angle is supplementary with both of its consecutive angles.
4. Show that the diagonals bisect each other.

Tell whether the quadrilateral is a parallelogram. Explain your reasoning.

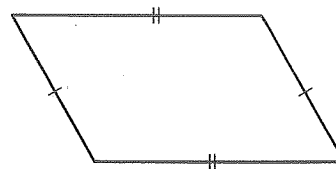
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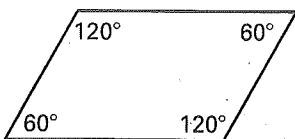
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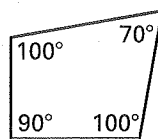
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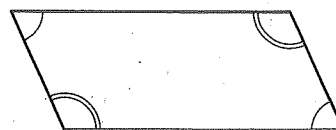
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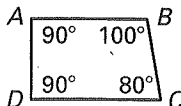
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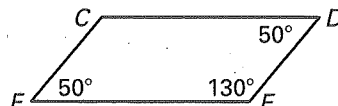
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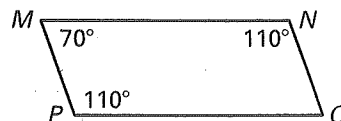
11.



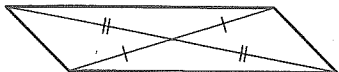
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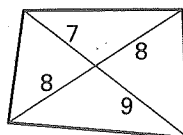
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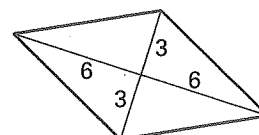
14.



15.

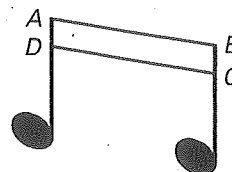


16.



The figure at the right shows a musical note with quadrilateral $ABCD$.

17. Tell two ways to show that quadrilateral $ABCD$ is a parallelogram using angles.
18. Tell two ways to show that quadrilateral $ABCD$ is a parallelogram using sides.

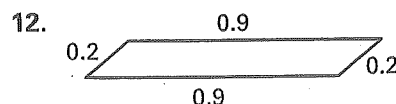
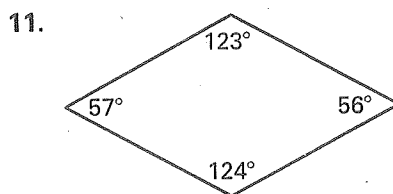
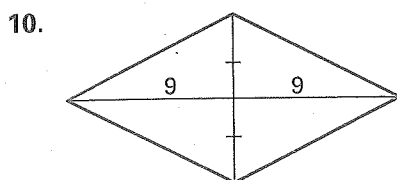
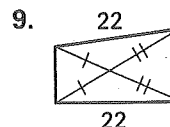
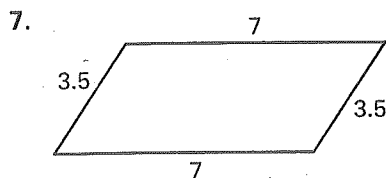
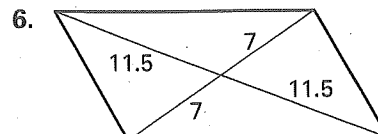
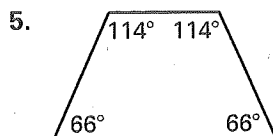
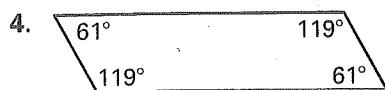


Practice B

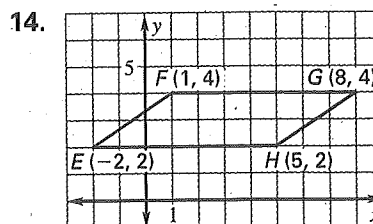
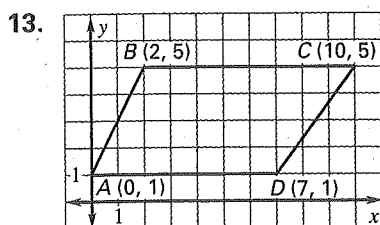
For use with pages 316–324

1. State two ways to show that a quadrilateral is a parallelogram using opposite sides.
2. State two ways to show that a quadrilateral is a parallelogram using angles.
3. State a way to show that a quadrilateral is a parallelogram using diagonals.

Tell whether the quadrilateral is a parallelogram. Explain your reasoning.



Use the slopes of the segments in the diagram to determine if the quadrilateral is a parallelogram.



15. The drawings show the same box with no front or back. At top, the front edges form a quadrilateral with four right angles. At bottom, the box leans to the right. In this position do the front edges form a parallelogram? Explain.

